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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/758,186	01/15/2004	Leonard Fuchs	30051/39757	5366
	7590 11/20/200 GERSTEIN & BORUN	EXAMINER		
233 SOUTH W	ACKER DRIVE	LEFF, STEVEN N		
6300 SEARS T CHICAGO, IL	=		ART UNIT	PAPER NUMBER
			1794	
			MAIL DATE	DELIVERY MODE
			11/20/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Astion Communication		Applica	ition No.	Applicant(s)				
		10/758	186	FUCHS, LEONARD				
Office Action Summary			er	Art Unit				
		STEVE	N LEFF	1794				
Period fo	The MAILING DATE of this communica or Reply	ation appears on t	he cover sheet with the	correspondence ad	ldress			
A SHO WHIC - Exter after - If NO - Failur Any r	ORTENED STATUTORY PERIOD FOR CHEVER IS LONGER, FROM THE MAINS IN THE M	LING DATE OF 37 CFR 1.136(a). In no ication. tory period will apply and I, by statute, cause the a	THIS COMMUNICATIO event, however, may a reply be till will expire SIX (6) MONTHS from application to become ABANDONE	N. mely filed n the mailing date of this c ED (35 U.S.C. § 133).				
Status								
1) 又	Responsive to communication(s) filed	on <i>07 August 20</i> 6	09					
·	This action is <b>FINAL</b> . 2b) ☐ This action is non-final.							
′=	Since this application is in condition fo	<i>′</i> —		osecution as to the	e merits is			
- <b>,</b>	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Dispositi	on of Claims							
•	4)⊠ Claim(s) <u>10-18</u> is/are pending in the application.							
	4a) Of the above claim(s) is/are	withdrawn from (	consideration.					
•	5) Claim(s) is/are allowed.							
	Claim(s) <u>10-18</u> is/are rejected.							
•	Claim(s) is/are objected to.	on and/on algetica	. un accino an o at					
اـــا(٥	Claim(s) are subject to restriction	on and/or election	requirement.					
Applicati	on Papers							
9) 🗌 🤈	The specification is objected to by the I	Examiner.						
10)	The drawing(s) filed on is/are: a	a)∏ accepted or	b)☐ objected to by the	Examiner.				
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
	Replacement drawing sheet(s) including the	ne correction is requ	uired if the drawing(s) is ob	jected to. See 37 CI	FR 1.121(d).			
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority u	ınder 35 U.S.C. § 119							
· .	Acknowledgment is made of a claim fo ☐ All  b)☐ Some * c)☐ None of:			)-(d) or (f).				
	1. Certified copies of the priority documents have been received.							
	2. Certified copies of the priority documents have been received in Application No							
	3. Copies of the certified copies of the priority documents have been received in this National Stage							
application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.								
~ 3	ee the attached detailed Office action	ior a list of the ce	rtilled copies not receive	ea.				
Attachmon	He)							
Attachment  1) Notic	e of References Cited (PTO-892)		4) Interview Summary	/ (PTO-413)				
2) Notic	e of Draftsperson's Patent Drawing Review (PTC	D-948)	Paper No(s)/Mail D	ate				
-	nation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date		5)  Notice of Informal I	Patent Application				

## **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- Claims 10-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knepler (5375508) in view of Neumann (4360128).

Knepler et al. teach a method for controlling a drink preparation machine (abstract). More specifically Knepler et al. teach a drink preparation machine configured to prepare each of a plurality of different drink types in one or more different quantities (col. 9 lines 40-45). More specifically Knepler et al., teach that the method comprises defining an amount of thermal energy to be required by each of a plurality of different drink units corresponding to a particular quantity (col. 9 line 55-57) of a particular drink type (col. 9 lines 37-60), where the amount of thermal energy is further taught with respect to column 11 lines 1-2 teaches that inadequate beverages are due to insufficient water temperatures, i.e. the temperature sensor as is described, and further with respect to the volume and temperature Knepler et al. specifically state that "water retained in the reservoir is monitored by the temperature sensor 52 which transmits a temperature value over line 62 to the control circuit 28. The control circuit 28 receives and utilizes the temperature value information from the temperature sensor 52 in

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controlling the brewing apparatus 20. Similarly, Knepler et al. teach that the level sensor 54 is coupled to the control circuit 28 via line 64 to provide level value information to the control circuit" (col. 4 lines 43-68).

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Knepler et al. continue by receiving a selection of a drink unit (col. 9 lines 42-48), withdrawing hot water for the selected drink unit from a common hot water source (col. 3 lines 65-67), wherein supply water enters the hot water source through an inlet (col. 4 lines 1-2) and the hot water is withdrawn from the hot water source through an outlet (col. 4 lines 30-33), and wherein the temperature of the hot water emanating from the outlet is greater than the temperature of the supply water entering the hot water source through the inlet (col. 4 lines 17-19). Knepler et al. continue by measuring a water level in the hot water source (col. 4 lines 20-22), measuring one or both of a pressure and a temperature within the hot water source (col. 4 lines 22-25), and determining a performance status of the hot water source based on the measured level within the hot water source, the measured temperature of the water within the hot water source, or some combination of two or more of the measured level, temperature, and pressure (col. 4 lines 25-30).

Knepler et al. further teach controlling the hot water withdrawal by enabling the hot water withdrawal for all of the plurality of different drink units at a predetermined full performance status of the hot water source (col. 10 lines 66-69, col. 4 lines 67-68-col. 5 lines 1-2), disabling the hot water withdrawal for all of the plurality of different drink units at a predetermined zero performance status of the hot water source (col. 10 lines 61-63) and disabling the hot water withdrawal for at least one drink unit occurs if the performance status falls below a threshold value (col. 10 lines 66-69). Knepler et al further teach that full performance status comprises a performance range (col. 8 lines 49-53), establishing a performance withdrawal value for each of the different drink units, and deducting this performance withdrawal value from the performance status with each withdrawal (col. 4 lines 44-46). Knepler et al. continue by heating up the hot water synchronously with the withdrawal (col. 10 lines 58-66), determining the performance status of the hot water source prior to controlling the hot water withdrawal by determining a level of the water in a boiler (col. 4 lines 45-47), and/or the temperature therein (col. 10 lines 58-66).

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performance range.

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However Knepler et al. are silent with respect to disabling the hot water withdrawal for at least one predetermined drink unit of the plurality of different drink units and enabling the hot water withdrawal for at least one predetermined drink unit of the plurality of different drink units at a predetermined partial performance status of the hot water source such that the partial performance status comprises at least one

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Neumann teaches a beverage dispenser which is responsive to a reservoir quantity (abstract). More specifically Neumann teaches a reservoir sensor which is outputted to control a level indicating display and to disable the reservoir heater when the reservoir is empty (col. 2 lines 3-6, col. 4 lines 1-30). Neumann further teaches a selector switch which is associated with different quantities of the beverage to be dispensed as a function of the present level of the tank (col. 5 lines 26-41) thus providing a controlled amount of dispensing of different desired quantities since the control determines whether the storage pan is filled to at least the desired level (col. 5 lines 6-13). With respect to enabling the hot water withdrawal for at least one predetermined drink unit of the plurality of different drink units at a predetermined partial performance status of the hot water source such that the partial performance status comprises at least one performance range, it is noted that said partial performance range is taken with respect specifically to Neumann teaching the sensor arrangement which is for signaling the present level of the reservoir tank, and specifically the zone corresponding to which the storage pan is filled (col. 5 lines 20-24). Neumann further teaches defining an amount of thermal energy to be required by each of the plurality of different drink units (col. 4 lines 44-55).

Thus, although Knepler et al. do not teach enabling hot water withdrawal for at least one predetermined drink unit of the multiple number of different drink units at a predetermined partial performance status of the hot water source, Knepler et al. do teach a water temperature sensor (col. 4 line 20), a level sensor (col. 4 line 23), and the desire to provide different batch sizes with respect to beverages (col. 9 lines 37-60). Therefore since Neumann teaches dispensing of a beverage from a brewer which is not dependant upon the level in the storage reservoir (col. 1 lines 48-50) and further teaching the zone corresponding to which the storage pan is filled (col. 5 lines 20-24) thus enabling the hot water withdrawal for at least one predetermined drink unit of the plurality of different

drink units at a predetermined partial performance status of the reservoir, one of ordinary skill in the art would have been motivated to combine the teachings and taught enabling hot water withdrawal for at least one predetermined drink unit of the multiple number of different drink units at a predetermined partial performance status since the brewer continues to brew all the way to depletion of the water in the hot water tank as opposed to only being capable of brewing one batch which is dependant upon the "fullness" of the reservoir as is taught by Neumann (col. 5 lines 19-25, col. 1 lines 52-54).

In addition, since Knepler et al. teach the desire to provide a method of dispensing hot beverages using a temperature and liquid level sensor, and further since Knepler et al. teach the desire to not only provide different sized batches but further to provide the ability to dispense different liquids of different sizes (col. 9 lines 42-45) using a cpu, it would have been obvious to one of ordinary skill in the art at the time of the invention to teach a partial performance status which would provide the advantage of allowing the brewer to brew a "half" volume of the batch as opposed to the "full" volume of the batch as is desired by Knepler et al. (col. 9 lines 45-57) thereby continuing to allow brewing of smaller batches when the amount of hot water available is not sufficient to brew an "extra large" batch thus increasing profits since the brewer continues to brew all the way to depletion of the water in the hot water tank as opposed to only being capable of brewing one large batch as is taught by Neumann (col. 5 lines 19-25, col. 1 lines 52-54).

Further, since design incentives and market forces provide a reason to make an adaptation, where the recitation of specific programming logic with respect to a cpu and a specific type of sensor, as is taught by Knepler et al., and Neumann, is a result of application of the prior art in a predictable manner since all the claimed elements were known in the prior art and one skilled in the art could have substituted the sensor mechanism as is taught by Knepler et al. with that of Neumann with no change in their respective functions, thus yielding predictable results to one of ordinary skill in the art at the time of the invention. Therefore it would have further been obvious to provide a partial performance operating range since combining the two methods, each of which is taught by the prior art to be useful for the same purpose of dispensing of an infusible beverage, flows logically from their having been individually taught in the prior art (see MPEP 2144.06), and since MPEP 2144.07 states that the selection of a known process

based on its suitability for its intended use supports a prima facie obviousness determination thereby in the instant case providing increased profits since the brewer continues to dispense all the way to depletion as is taught by Neumann (fig. 2).

• Claims 10-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knepler (5375508) in view of d'Alayer de Costemore (4468406).

Knepler is taken as above however Knepler is silent with respect to disabling the hot water withdrawal for at least one predetermined drink unit of the plurality of different drink units and enabling the hot water withdrawal for at least one predetermined drink unit of the plurality of different drink units at a predetermined partial performance status of the hot water source such that the partial performance status comprises at least one performance range.

d'Alayer de Costemore teaches a microprocessor controlled brewing apparatus (abstract) for multiple different types of drinks (col. 3 lines 47-48). More specifically d'Alayer de Costemore teaches a cpu which is programmed to shut-off the water flow in the event the complete brewing cycle can not be accomplished, i.e. disable the hot water withdrawal for at least one predetermined drink unit (a full batch) of the plurality of different drink units. d'Alayer de Costemore further teaches that the hot water is withdrawn all the way to depletion regardless of the reservoirs level, i.e. enabling the hot water withdrawal for at least one predetermined drink unit of the plurality of different drink units at a predetermined partial performance status of the hot water source such that the partial performance status comprises at least one performance range (col. 4 lines 55-69). It is noted that the performance range is the number of cups which are brewed prior to the reservoir emptying.

In addition, d'Alayer de Costemore further teaches defining the thermal energy as a function of the amount and temperature required for proper brewing of the desired drink unit since d'Alayer de Costemore specifically teaches a timed flow of hot water from the reservoir 16 to the coffee filter 15, for a period which varies depending on the number of cups selected to be brewed in the machine. With this method, the reservoir 16 is filled, the number of cups selected by a pushbutton or rotary switch 32 and only that amount of water to brew the number of cups selected is caused to flow from the reservoir

16 through the filter 15 to the coffee pot thus defining an amount of thermal energy required (col. 2 lines 56-68).

Thus, although Knepler et al. do not teach enabling hot water withdrawal for at least one predetermined drink unit of the multiple number of different drink units at a predetermined partial performance status of the hot water source, Knepler et al. do teach a water temperature sensor (col. 4 line 20), a level sensor (col. 4 line 23), and the desire to provide different batch sizes with respect to beverages (col. 9 lines 37-60). Therefore since d'Alayer de Costemore teaches dispensing of a beverage from a brewer which is not dependant upon the level in the storage reservoir (col. 4 lines 57-68) and further teaching the zone corresponding to which brewing takes place regardless of the tank not being completely filled prior to brewing (col. 4 lines 57-68), i.e. enabling the hot water withdrawal for at least one predetermined drink unit of the plurality of different drink units at a predetermined partial performance status of the reservoir, one of ordinary skill in the art would have been motivated to combine the teachings and taught enabling hot water withdrawal for at least one predetermined drink unit of the multiple number of different drink units at a predetermined partial performance status since the brewer continues to brew all the way to depletion of the water in the hot water tank as opposed to only being capable of brewing one batch which is dependant upon the "fullness" of the reservoir as is taught by d'Alayer de Costemore (col. 4 lines 57-68).

In addition, since Knepler et al. teach the desire to provide a method of dispensing hot beverages using a temperature and liquid level sensor, and further since Knepler et al. teach the desire to not only provide different sized batches but further to provide the ability to dispense different liquids of different sizes (col. 9 lines 42-45) using a cpu, it would have been obvious to one of ordinary skill in the art at the time of the invention to teach a partial performance status which would provide the advantage of allowing the brewer to brew a "half" volume of the batch as opposed to the "full" volume of the batch as is desired by Knepler et al. (col. 9 lines 45-57) thereby continuing to allow brewing of smaller batches when the amount of hot water available is not sufficient to brew an "extra large" batch thus increasing profits since the brewer continues to brew all the way to depletion of the water in the hot water tank as opposed to only being capable of brewing one large batch as is taught by d'Alayer de Costemore (col. 4 lines 57-68).

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Further, since design incentives and market forces provide a reason to make an adaptation, where the recitation of specific programming logic with respect to a cpu and a specific type of sensor, as is taught by Knepler et al., and d'Alayer de Costemore, is a result of application of the prior art in a predictable manner since all the claimed elements were known in the prior art it would have further been obvious to provide a partial performance operating range since combining the two methods, each of which is taught by the prior art to be useful for the same purpose of dispensing of an infusible beverage, flows logically from their having been individually taught in the prior art (see MPEP 2144.06), and since MPEP 2144.07 states that the selection of a known process based on its suitability for its intended use supports a prima facie obviousness determination thereby in the instant case providing increased profits since the brewer continues to dispense all the way to depletion as is taught by d'Alayer de Costemore (col. 4 lines 57-68).

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## Response to Arguments

With respect to applicants argument that Knepler is silent with respect to defining an amount of thermal energy to be required by each of the plurality of the drink units, and more specifically defining an amount of thermal energy required for subsequent dispensing after an initial dispensing and refilling of the hot water tank with cold water, it is initially noted that the features upon which applicant relies are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993), where it is further noted that although claim 1 defines an amount of thermal energy to be required by each of the plurality of the drink units, there is no further limitation relating this "thermal energy" to the overall performance status of the hot water source.

With respect to applicants argument that Knepler is silent with respect to defining an amount of thermal energy to be required by each of the plurality of the drink units, and more specifically defining an amount of thermal energy required by subsequent dispensing after an initial dispensing and refilling of the hot water tank with cold water, it is initially noted that although claim 1 defines an amount of thermal energy to be required by each of the plurality of the drink units, there is no further limitation relating this "thermal energy" to the overall performance status of the hot water source. Thus broadly taken Knepler defines an amount of thermal energy necessary since Knepler teaches at column 11 lines 1-2 that

inadequate beverages are due to insufficient water temperatures, i.e. a desired dispensing temperature which would require an amount of thermal energy to maintain this temperature.

However it is further noted that Knepler et al. teach that "water retained in the reservoir is monitored by the temperature sensor 52 which transmits a temperature value over line 62 to the control circuit 28. The control circuit 28 receives and utilizes the temperature value information from the temperature sensor 52 in controlling the brewing apparatus 20. Similarly, the level sensor 54 is coupled to the control circuit 28 via line 64 to provide level value information to the control circuit" (col. 4 lines 43-68). Thus Knepler et al. further teaches defining the thermal energy as a function of the amount and temperature required for proper brewing of the desired drink unit since Knepler et al. describe the status of the brewer being a function of specific desired limits and minimums with respect to temperature, and measured water within the hot water tank (col. 10 lines 46-66) for producing a desired beverage.

In addition, Neumann further teaches defining the thermal energy as a function of the amount and temperature required for proper brewing of the desired drink unit since Neumann describes the status of the brewer being a function of specific desired limits and minimums with respect to temperature for producing proper temperature of the beverage (col. 4 lines 53-55), and since Neumann further dispenses variable amounts of heated water from the hot water tank and activating the heating element, or turning the heating element off, as a function of the desired dispensing temperature since the amount of measured water within the hot water tank (col. 4 lines 45-55) directly affects the temperature of the beverage (col. 4 lines 45-47).

In addition, d'Alayer de Costemore further teaches defining the thermal energy as a function of the amount and temperature required for proper brewing of the desired drink unit since d'Alayer de Costemore specifically teaches a timed flow of hot water from the reservoir 16 to the coffee filter 15, for a period which varies depending on the number of cups selected to be brewed in the machine. With this method, the reservoir 16 is filled, the number of cups selected by a pushbutton or rotary switch 32 and only that amount of water to brew the number of cups selected is caused to flow from the reservoir 16 through the filter 15 to the coffee pot thus defining an amount of thermal energy required (col. 2 lines 56-68).

## Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven Leff whose telephone number is (571) 272-6527. The examiner can normally be reached on Mon-Fri 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached at (571) 272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Drew E Becker/ Primary Examiner, Art Unit 1794

/Steven Leff/ Examiner, Art Unit 1794